

DERWENT-ACC-NO: 1984-027443

DERWENT-WEEK: 198405

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TITLE: Non oriented cellulose ester thin  
film mfr. - by  
solvent, applying to  
sepg. thin film from  
plate

PATENT-ASSIGNEE: DAICEL CHEM IND LTD[DAIL]

PRIORITY-DATA: 1982JP-0103488 (June 15, 1982) ,  
1989JP-0089137 (June 16, 1982)  
, 1989JP-0089135 (May 27, 1982) , 1989JP-0089136 (June 16,  
1982)

PATENT-FAMILY:

| PUB-NO               | PAGES | PUB-DATE          | MAIN-IPC |     |
|----------------------|-------|-------------------|----------|-----|
| JP 58219023 A<br>005 | N/A   | December 20, 1983 |          | N/A |
| JP 88025932 B<br>000 | N/A   | May 27, 1988      |          | N/A |
| US 4878973 A<br>000  | N/A   | November 7, 1989  |          | N/A |

APPLICATION-DATA:

| PUB-NO                         | APPL-DATE            | APPL-DESCRIPTOR | APPL-NO |
|--------------------------------|----------------------|-----------------|---------|
| JP 58219023A<br>1982JP-0103488 | N/A                  |                 |         |
| US 4878973A<br>1985US-0767239  | June 15, 1982<br>N/A |                 |         |
|                                | August 19, 1985      |                 |         |

INT-CL (IPC): B29C041/12, B29D007/08 , B29K001/00 ,  
B29L007/00 , B32B031/04 , C08L001/10

ABSTRACTED-PUB-NO: JP 58219023A

BASIC-ABSTRACT:

Method comprises (a) solubilising cellulose ester in organic solvent, (b) flowing and extending on a flat glass plate, (c) forming a thin film with uniform thickness on the glass plate by removing solvent, (d) sepg. the thin film from the glass plate, (e) recovering the thin film from water and drying after supporting on frame in wet state.

Cellulose ester is e.g. cellulose nitrate, cellulose acetate, cellulose propionate, or cellulose butyrate acetate. The organic solvent is e.g. ketone such as MEK, lower fatty acid ester such as butyl acetate, isobutyl acetate, cyclohexanone, methylene chloride, methanol, toluene, or ethylene glycol acetate monomethyl ether. Non-oriented cellulose thin film kept in the uniform tension state is obtd. The cellulose thin film is used for photomask protection.

ABSTRACTED-PUB-NO: US 4878973A

EQUIVALENT-ABSTRACTS:

A transparent thin film of unoriented cellulose ester held under tension is produced by A) casting a soln. of the ester in a plasticiser free organic solvent onto a smooth glass plate, pref. having less than 100 micrometre undulation per 100cm<sup>2</sup> plate, and removing the solvent, B) separating the uniformly thin, transparent film obtd. from the glass plate by immersing it in water and C) setting and bonding the moist recovered film on a mount and drying the film.

The film is pref. made of cellulose nitrate. The film is pref. held only on

the periphery of the mount and is tensioned by a slight shrinkage. The highly transparent film has a minimum absorption for UV and is not more than 0.085-0.095 micrometre thick.

USE/ADVANTAGE - To protect a photomask during lithographic processing; a reliable and effective method to produce such film.

(6pp)

CHOSEN-DRAWING: Dwg.0/0

TITLE-TERMS: NON ORIENT CELLULOSE ESTER THIN FILM  
MANUFACTURE SOLUBLE ESTER  
ORGANIC SOLVENT APPLY GLASS PLATE REMOVE  
SOLVENT SEPARATE THIN FILM  
PLATE

ADDL-INDEXING-TERMS:

PHOTOMASK

DERWENT-CLASS: A11 P73

CPI-CODES: A03-A02; A03-A03; A08-S02; A11-B04C; A12-L02;  
A12-S06A;

UNLINKED-DERWENT-REGISTRY-NUMBERS: 0270U; 0345U ; 0437U ;  
1056U

POLYMER-MULTIPUNCH-CODES-AND-KEY-SERIALS:

Key Serials: 0036 3003 0211 0229 1975 1976 1977 3203 1980  
2318 2336 2386 2393

2427 2441 2507 2519 2654 2807

Multipunch Codes: 014 03- 065 067 068 070 13- 231 239 252  
316 332 392 398 402  
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